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| PLICATION NO.   | · F   | ILING DATE |  | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO       |  |  |
|-----------------|-------|------------|--|----------------------|-------------------------|-----------------------|--|--|
| 10/089,018      |       | 08/15/2002 |  | Joerg Hauer          | 10191/2304              | 8991                  |  |  |
| 26646           | 7590  | 10/27/2003 |  |                      | EXAM                    | EXAMINER              |  |  |
| KENYON & KENYON |       |            |  |                      | BELLAMY, TAMIKO D       |                       |  |  |
| ONE BROA        |       | 0004       |  | •                    | ART UNIT                | ART UNIT PAPER NUMBER |  |  |
| ILW TOR         | , 111 |            |  |                      | 2856                    |                       |  |  |
|                 |       |            |  |                      | DATE MAILED: 10/27/2003 |                       |  |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   |                        |   | MC     |  |  |  |  |  |  |  |
|---|------------------------|---|--------|--|--|--|--|--|--|--|
| •   | Application No.        | Applicant(s)  |        |  |  |  |  |  |  |  |
| Office Action Cummans   | 10/089,018             | HAUER ET AL.  |        |  |  |  |  |  |  |  |
| Office Action Summary   | Examin r               | Art Unit  |        |  |  |  |  |  |  |  |
| The MAN INC DATE of this communication and  | Tamiko D. Bellamy      | 2856  | Idraga |  |  |  |  |  |  |  |
| The MAILING DATE of this communication app ars on the cov r sheet with the correspond nce address Period for Reply  |                        |   |        |  |  |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status |                        |   |        |  |  |  |  |  |  |  |
| 1) Responsive to communication(s) filed on <u>09 A</u>  | ugust 2003 .           |   | •      |  |  |  |  |  |  |  |
| 2a)☐ This action is <b>FINAL</b> . 2b)⊠ Thi   | s action is non-final. |   |        |  |  |  |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |                        |   |        |  |  |  |  |  |  |  |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  |                        |   |        |  |  |  |  |  |  |  |
| 4)⊠ Claim(s) <u>8-14</u> is/are pending in the application.   |                        |   |        |  |  |  |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.  |                        |   |        |  |  |  |  |  |  |  |
| 5) Claim(s) is/are allowed.   |                        |   |        |  |  |  |  |  |  |  |
| 6)⊠ Claim(s) <u>8-14</u> is/are rejected.   |                        |   |        |  |  |  |  |  |  |  |
| 7) Claim(s) is/are objected to.   |                        |   |        |  |  |  |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or election requirement.   |                        |   |        |  |  |  |  |  |  |  |
| Application Papers  |                        |   |        |  |  |  |  |  |  |  |
| 9) The specification is objected to by the Examiner.  |                        |   |        |  |  |  |  |  |  |  |
| 10) $\square$ The drawing(s) filed on <u>15 August 2002</u> is/are: a) $\square$ accepted or b) $\square$ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |                        |   |        |  |  |  |  |  |  |  |
| 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.  |                        |   |        |  |  |  |  |  |  |  |
| If approved, corrected drawings are required in reply to this Office action.  |                        |   |        |  |  |  |  |  |  |  |
| 12)☐ The oath or declaration is objected to by the Examiner.  |                        |   |        |  |  |  |  |  |  |  |
| Priority under 35 U.S.C. §§ 119 and 120   |                        |   |        |  |  |  |  |  |  |  |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).   |                        |   |        |  |  |  |  |  |  |  |
| a) ☐ All b) ☐ Some * c) ☐ None of:  |                        |   |        |  |  |  |  |  |  |  |
| 1. Certified copies of the priority documents have been received.   |                        |   |        |  |  |  |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No  |                        |   |        |  |  |  |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.  |                        |   |        |  |  |  |  |  |  |  |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  |                        |   |        |  |  |  |  |  |  |  |
| a) ☐ The translation of the foreign language provisional application has been received.  15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  |                        |   |        |  |  |  |  |  |  |  |
| Attachment(s)   |                        |   |        |  |  |  |  |  |  |  |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)   | 5) Notice of           | Summary (PTO-413) Paper N<br>Informal Patent Application (P |        |  |  |  |  |  |  |  |

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### **DETAILED ACTION**

## **Drawings**

- 1. Figure 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
- 2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 22, 22'. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

# Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 8-10, 13, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Greiff et al. (5,650,568).

With respect to claim 8, as depicted in fig. 8, Greiff et al. discloses a flywheel (e.g., rotor 144), a bridge, two opposite bases (e.g., post assemblies 152a,b), and a flexure spring device (e.g., spoke flexures 158a-d). Greiff et al. further discloses a substrate (col.

14, line 28). As depicted in fig. 8, Greiff et al. disclose a V-shaped flexural spring of the flexure spring device (e.g., spoke flexures 158a-d) that is attached to the opposite sides of the bridge (col. 2, lines 25-26).

With respect to claim 9, as depicted in fig. 8, Greiff et al. discloses a first and second V-shaped flexural spring (e.g., spoke flexures 158a-d) each having open angles that are equal to one another.

With respect to claim 10, as depicted in fig. 8, Greiff et al. discloses the first and second V-shaped flexural springs (e.g. spoke flexures 158a-d) are connect to the bridge and form an X shape.

With respect to claim 13, Greiff et al. disclose that the flywheel (e.g., rotor 144) including a central hub (150) is supported over the substrate by a pair of bases (e.g., post assemblies 152a,b) (col. 14, lines 29-31). This teaching clearly infers and/or suggests that the two bases (e.g., post assemblies 152a,b), which include a bridge (see fig. 8), are suspended freely over the substrate.

With respect to claim 14, Greiff et al. discloses a silicon layer and a polysilicon layer (col. 2, lines 41-53).

### Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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6. Claims 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greiff et al. (5,650,568).

With respect to claim 11, Greiff et al. discloses that the wheel assembly is adapted for vibrating rotationally at a predetermined frequency in the first plane and about the drive axis (col. 1, lines 42-47). As depicted in fig. 8 Greiff et al. discloses a selected angle for the V-shaped flexural springs (e.g., spoke flexures 158a-d). Greiff et al. lacks the detail of an open angle that is selected such that the natural frequency about the axis of rotation perpendicular to the surface of the substrate is small than each natural frequency about the axis of rotation parallel to the surface of the substrate. However, the selected angle is a design choice clearly within the preview of one having ordinary skill in the art. Therefore, to employ Greiff et al on a selected open angle would have been obvious to one of ordinary skill in the art at the time of the invention since this reference explicitly teaches its use on a vibrating wheel that typically has a flexural spring with a selected angle.

With respect to claim 12, as depicted in fig. 8, Greiff et al. discloses two bases (e.g., post assemblies 152a,b) that are rectangular shaped. Greiff et al. lacks the detail of the two bases having a wedge shape. However, the court held in <u>In re Dailey</u>, 357 F.2d 669, 149 USPQ 47 (CCPA 1966), that a change in the shape of a prior art device is a design consideration within the skill of the art. Therefore, to employ Greiff et al on bases having a wedge shape would have been obvious to one of ordinary skill in the art at the time of the invention since this reference explicitly teaches its use on a vibrating wheel that typically has bases that are rectangular shaped with a selected angle.

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Response to Remarks

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7. Applicant's arguments with respect to claims 8-14 have been considered but are moot in

view of the new ground(s) of rejection. It is the examiners position that claims 1-14 are not

patentable over the newly applied art of Greiff et al.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Tamiko D. Bellamy whose telephone number is (703) 305-4971.

The examiner can normally be reached on Monday through Friday 10:00 AM to 7:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Hezron Williams can be reached on (703) 305-4705. The fax phone number for the

organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 308-0956.

Tamiko Bellamy

(.B.

October 7, 2003

Negra E. Will HEZRON WILLIAMS

SUPERVISORY PATENT EXAMINER

**TECHNOLOGY CENTER 2800** 

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